New England

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Ups and Downs of Employment

Before World War II New England's manufacturing employment was more stable than the nation's as a whole. A study of cyclical fluctuations in the 20 years before the war showed that in general a 10 percent drop in United States manufacturing employment would be accompanied by only an 8.4 percent decline in New England.

But in the postwar period, New England has lost this stability. In all three postwar recessions manufacturing employment declined more on a percentage basis in New England than in the United States.

New England's worst decline was in the 1947–1949 recession. The most severe drop for the nation was the recession that began after the peak of 1957. Even then the New England decline was 17 percent, compared to 15 percent for the nation.

These greater fluctuations of New England industries in the entire postwar period indicate rather clearly that the region is more sensitive than the nation to

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This article is based on a study of fluctuations in New England manufacturing employment conducted by Frank W. Gery, chairman of the economics department, Eastern Nazarene College, Quincy, Mass., with the aid of a grant from the Federal Reserve Bank of Boston. Copies of the complete study are available on request from the bank's research department.

changes in business conditions. But percentage changes in employment do not by themselves accurately reflect this sensitivity.

The percentage changes will include both fluctuations due to cyclical changes and those due to the long run trend of the industry. (Adjustments are made in the employment figures for seasonal variations.)

The New England textile industry, for instance, has much deeper movements from peak to trough than does this industry nationally. This is traceable partly to the greater cyclical sensitivity of the regional industry, but primarily it is because of a downward secular trend which accentuates cyclical reversals.

To take another example, transportation equipment was one of only three industries which declined less in New England than the nation, averaged over the three postwar recessions. The industry in New England has grown at more than double the rate of the national industry, thus mitigating the cyclical decline in New England.

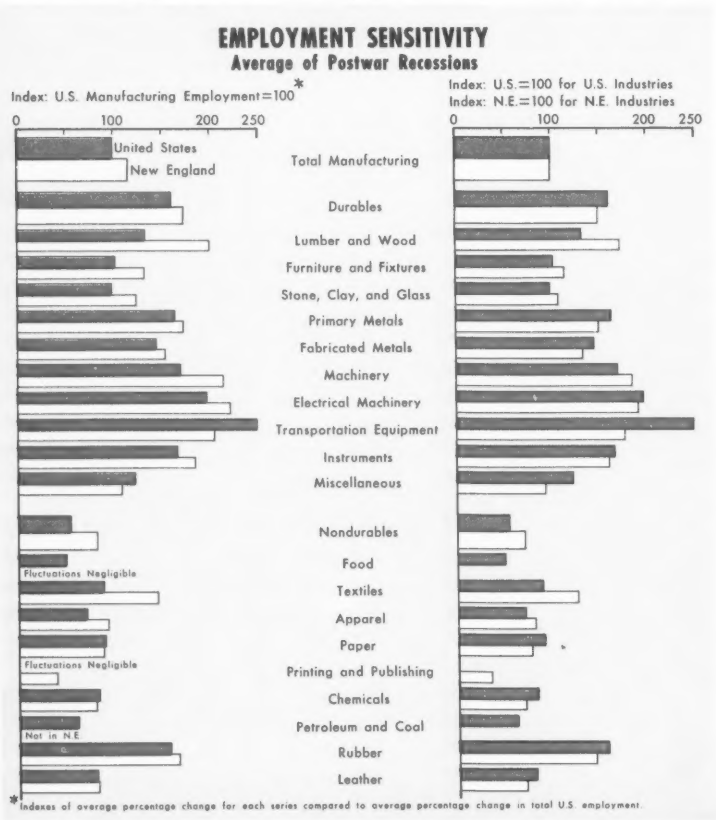
Because of the interaction of cyclical and secular factors, an industry's sensitivity to business cycles is measured here with the secular trend removed. The effect is to assume that employment fluctuates around a horizontal line, thus removing any increase or decrease of employment which is due to long run forces rather than cyclical fluctuations.

The trend in employment must be measured from comparable stages in the business cycle, and for that reason 1947 and 1956 were chosen.

The remaining cyclical fluctuations are then compared to the cyclical fluctuations of U. S. manufacturing. With this measure as an index of 100, New England industries' sensitivity is 116. That means that a 10 percent decline in U. S. employment would be associated with an 11.6 percent decline in New England. Thus, even with long run trend removed, New England employment is 16 percent more sensitive than the United States.

This greater sensitivity of New England industries is true for both durable and nondurable manufacturing. In each case on the left hand side of the accompanying chart the New England index is shown relative to total U. S. manufacturing (rather than to movements of that particular industry in the United States).

By this measure New England's most sensitive industry is electrical machinery. It is roughly two and one-quarter times more sensitive to cyclical fluctuations than U. S. manufacturing employment. This industry is more sensitive in New England than it is in the U. S. where it is not quite two times as sensitive as total manufacturing employment. After removing long run trend, national manufacturing employment has had an average decline of 11.5 percent during the three postwar recessions. The average decline for the electrical machinery industry in New England was 25.4 percent.



The index of sensitivity has important qualifications. The industries shown are broad categories, and the composition of an industry may differ in the region and the nation. Part of the variations in sensitivity may be explained by this difference in composition. Automobile manufacture, for instance, is unimportant in New England's transportation equipment industry but is prominent in the national industry.

It is true also that the region and the U. S. are not completely comparable because of the great difference in size of the two units. The measure of sensitivity compares New England and each of its industries with the U. S. average. This U. S. average represents the aggregate net effect of many divergent regional movements, each of which might be more severe than the U. S. total if timing differs between regions.

To show the aggregation problem in better perspective, a second measure of sensitivity is shown in the chart. This index relates sensitivity of each industry to over-all New England employment.

The regional index can be compared with the U. S. index for a better indication of sensitivity. The two indexes reveal that New England durables are less sensitive compared to regional employment than U. S. durables compared to U. S. employment. The opposite holds for nondurables.

Six New England industries are more sensitive compared to regional employment than the respective U. S. industries compared to the national total. New England lumber, machinery and textiles appear to be "supersensitive;" i.e., they are much higher by both indexes than the national industry.

Metropolitan Areas

The sensitivity of a metropolitan area to employment fluctuations will depend to a large extent on the degree to which the area employment is concentrated in one or a few industries.

The chart above shows the sensitivity of New England's standard metropolitan areas as measured over the three postwar recessions. The index base of 100 represents New England manufacturing employment. Only two of the standard metropolitan areas have less sensitivity to cyclical fluctuations than the regional average.

Six metropolitan areas had their most severe postwar employment decline in the New England recession which began in 1956: Fall River, Providence, Brockton, Worcester, Pittsfield and Hartford. The other 11 areas had their most serious declines during the 1947-49 recession.

Areas which were concentrated in 1947 and did not diversify had equal or higher sensitivity

than the New England average in the 1956-58 recession (Fall River, Pittsfield, Hartford, New Britain-Bristol). Areas still in transition, such as Waterbury and Providence, kept their high sensitivity in 1956-58. Areas of increasing diversification, such as New Bedford, Lawrence and Lowell, had lower sensitivity in 1956-58.

Cyclical Timing

Starting at the trough, the upturn of many New England manufacturing areas has a tendency to lag more than national industry patterns. This results from the slowness of New England employers in rehiring laid off workers, which may in turn be a reflection of the region's slower rate of growth. In areas of faster long run growth, employers have more confidence that a cyclical upturn will continue once begun.

In general, national manufacturing employment series reach their peaks before general business cycle peaks and have a tendency to be coincidental or even lag slightly at troughs. This U. S. pattern also prevails in New England, though the tendency to lead is not quite as strong in New England.

Eight of the U. S. employment series consistently lead the other employment series. They are furniture, stone-clay-glass, textiles, apparel, rubber, leather, miscellaneous manufacturing,

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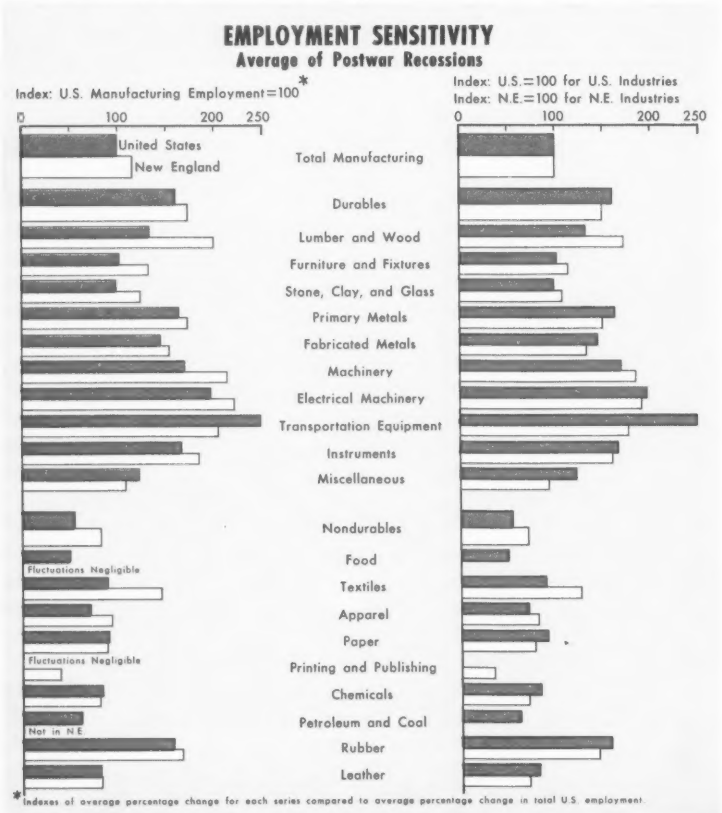

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Eight of the U. S. employment series consistently lead the other employment series. They are furniture, stone-clay-glass, textiles, apparel, rubber, leather, miscellaneous manufacturing,

and the series for nondurable manufacturing.

In New England five employment series consistently lead both national economic activity and the remainder of the New England employment series. They are: apparel, leather, nondurables, fabricated metals, and primary metals.

Long Run Trends

Six patterns of long run employment trends emerge in New England industries after removal of cyclical influences. The patterns reveal that since 1953 growth rates have slowed down or completely stopped in all but three industries.

The growth trends shown in the table on this page are for the postwar period 1947-1956. The majority of both New England and U. S. industries do not show a constant rate of growth. No industries are growing at an increasing rate, and only three New England industries are growing even at a constant rate. The remainder are either declining, growing at a decreasing rate, or holding their own employment-wise.

Many industries in those groups which have not grown since 1953 are often referred to as growth industries. As was pointed out earlier, broad industrial groupings are used here. Employment has declined in some segments of the so-called "growth" industries and advanced in others. The declining elements of the industry act as a drag on the industry total.

The leveling off or gradual decline of the upward trend in the majority of industries may explain the slow recovery in manufacturing employment after the trough of the 1956-58 recession. In previous recessions the long run upward pressure was greater, causing employment to expand more rapidly after reaching the trough.

The slowing down of manufacturing employment does not necessarily mean a leveling off of total output. Output is up because of increases in productivity. As productivity increases more workers can be employed in nonmanufacturing.

EMPLOYMENT TRENDS 1947-1956

GROWTH PATTERN	PERCENT CHANGE IN EMPLOYMENT			
	UNITED STATES		NEW ENGLAND	
Horizontal trend	Food	0.0	Rubber	2.8
			Food	2.5
			Leather	– 0.9
			Fabricated Metals	– 2.2
Increasing at constant rate	Paper	26.7	Chemicals	19.0
	Printing and Publishing	21.6	Printing and Publishing	14.2
			Paper	10.0
Increasing at decreasing rate	Chemicals	28.2	Transportation Equipment	150.4
	Stone, Clay, Glass	12.7		
Increasing through 1953; level from 1953 to 1956	Electrical Machinery	53.8	Instruments	32.4
	Instruments	30.9	Furniture and Fixtures	20.4
	Fabricated Metals	23.8	Ordnance	19.8
	Machinery	19.2	Apparel	14.4
	Furniture and Fixtures	14.4	Stone, Clay, Glass	11.9
	Miscellaneous	10.6		
	Primary Metals	10.4		
	Apparel	6.7		
Increasing through 1953; decreasing since 1953	Ordnance	492.4	Electrical Machinery	52.9
	Transportation Equipment	71.0	Miscellaneous	11.4
	Rubber	8.6	Machinery	0.9
	Petroleum and Coal	7.4		
Declining at constant rate	Leather	– 9.0	Primary Metals	– 7.9
	Lumber	–13.8	Lumber	–10.4
	Textiles	–25.3	Textiles	–49.2

REVIEW OF THE SECOND QUARTER:

Recovery — and Beyond

Business activity during the second quarter, whether measured by production, employment, incomes or spending, was on the upswing. The recession of 1957 and 1958 is rapidly being pushed out of mind by new developments and intriguing prospects.

Recovery commenced over a year ago, and the economy has advanced rather continuously since then. Its pace during the past quarter was stimulated by the urgency to accumulate sufficient inventories to tide business operations through a possible strike in the steel industry. At midyear there were still some statistical measures, such as employment, wherein the setbacks created by the recession had not been fully made up. By most measures, however, the advance had reached and pushed beyond pre-recession attainments. This growth beyond recovery has generated an optimism which desires to look beyond hitherto limiting horizons, to expand its plans, grow even faster, and share in the expected new boom.

With these blessings of improved business have grown new problems and intensifications of old problems. Increasing demands for credit, interest rates already high, critical difficulties in governmental financing, the bidding up of stock market values to seemingly vulnerable levels, a price structure which retains over-all stability largely because of currently declining prices of agricultural products, and a worsening of the competitive position of American producers in international markets——these are some of the interrelated problems that need prudent handling if the expected economic growth is to be sound and prosperous.

In New England the index of ***manufacturing production*** rose somewhat less evenly and less rapidly than the national index. The May value of 117, although still below its pre-recession peak, measured a 16 percent recovery over a 12 months' period. Outstanding was the 29 percent gain in output of leather products over the same period to set a new record.

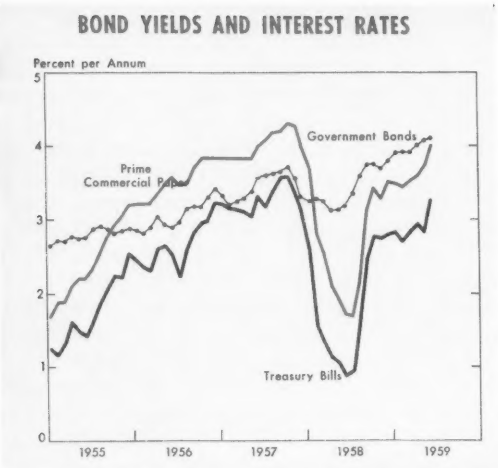
The index of ***electric power output*** in New England has been higher during each week of 1959 than during the corresponding 1958 week. It reached a record seasonally adjusted value in late May, and at midyear was 13 percent higher than a year earlier.

Increases in production were prompted in part by the desire of manufacturers to rebuild their own inventories closer to normal levels, but were also strongly influenced by an increasing flow of ***new orders.*** In each of the first six months of 1959 a majority in the New England Purchasing Agents' poll reported orders to be expanding. In like manner the monthly index of new orders computed by the Associated Industries of Massachusetts has run well above comparable 1958 values. The upturn has been most pronounced for some of the durable goods industries, but even the textile industry has benefited.

More business meant improved health for business firms. During the second quarter, 11 percent fewer ***business failures*** were recorded in New England than a year earlier, while the number of ***new incorporations*** in the six states increased by 33 percent.

Of particular importance has been the continued improvement in ***employment*** conditions. Many workers lost their jobs or were forced into temporary idleness in consequence of the late recession. By April 1958 New England's nonagricultural employment showed a 12 months' contraction amounting to 4.8 percent, and the contraction reached a 21 percent level in July of that year for the nonelectrical machinery industry. Since then a gradual recovery has gone on month by month with due allowance for normal seasonal trends. The pace of recovery in terms of nonagricultural employment, however, has seemed discouragingly slow. Full recovery has yet to be attained, although a precise measurement is difficult because current employment statistics are not strictly comparable to those of 1957 and earlier years.

It can be noted that June 1959 nonfarm employment in New England was 2.5 percent



greater than a year earlier, and that nearly all industries shared in that gain, with greatest relative gains in durable goods manufacturing.

The improvement is reflected more markedly in unemployment statistics. Insured unemployment in the six New England states declined week after week during the second quarter and in late June was only half as great as a year ago. The number of initial claims for unemployment compensation dropped correspondingly. Of the region's 17 major labor market areas, only Lowell, New Bedford, Providence and Bridgeport were classified in May as having unemployment amounting to 9 percent or more of their respective labor forces.

Restoration of full workweeks proceeded more rapidly than the rehiring of workers. At New England factories in June average weekly hours ranged from 40.4 in Rhode Island to 42.6 in Vermont, and well above year-ago figures in each state and in most industries.

The combined effect of expanding employment and lengthening workweeks is well indicated by the charted course of the man-hour index for New England manufacturing production workers. The trend continues to be one of recovery following the sharp reversal which took place a little over a year ago. The June 1959 over-all index is the highest since October 1957. Both recovery and the preceding decline were relatively sharper for durable than for nondurable goods industries.

Average weekly earnings of factory workers increased further during the quarter in each of the six states. Compared with a year ago the June averages disclosed gains ranging from 6 to 11 percent. These gains were the result of both higher hourly wage rates and longer workweeks with premium pay for overtime hours. They made an important contribution to the increase in aggregate personal income in the region, which in turn has supported an expanding volume of retail trade.

New England ***department store sales*** during the second quarter exceeded year-ago sales by 4 percent, maintaining the year-to-year margin attained in the first quarter. Gains in southern New England slightly exceeded those in the three northern states. Despite the gains so far this year, sales are running about 1 or 2 percent lower than in early 1956 and 1957. Departmentally, sales gains have been widespread, with special strength in men's and women's apparel, furniture, appliances, floor coverings, sporting goods and cameras, but with less strength in basement merchandise.

Inventories have increased in most departments about in line with sales. New orders for merchandise are being placed by the stores in aggregate volume more than one-fourth greater than a year ago. Charge and instalment accounts, particularly the revolving credit type, are in more frequent use. At midyear accounts receivable at the region's department stores were 7 percent higher than a year ago. Collections have increased but at a slower rate than credit sales with a resulting slight dip in collection ratios.

Registrations of ***new automobiles*** in New England during the first five months of 1959 were reported to be 18 percent more than the comparable 1958 figure, but were still lagging 6 percent behind the 1957 pace, and 13 percent behind the 1956 pace. As the market for late-model used cars has been strong, dealers sense a widespread customer attitude to defer action on new car purchases until the much-discussed smaller 1960 models are available.

The wholesale commodity ***price*** index reached a new peak during the second quarter from which it subsequently subsided. The consumer price index rose slightly to a new peak after many months of wavering within a narrow range. In both cases there was a close balance between individual rising and falling prices, and over-all price stability for most of the period.

Conditions in the field of ***finance*** feature generally high interest rates, a rising demand for credit accommodations, and a less than compensating rise in the supply of new investment funds from saving.

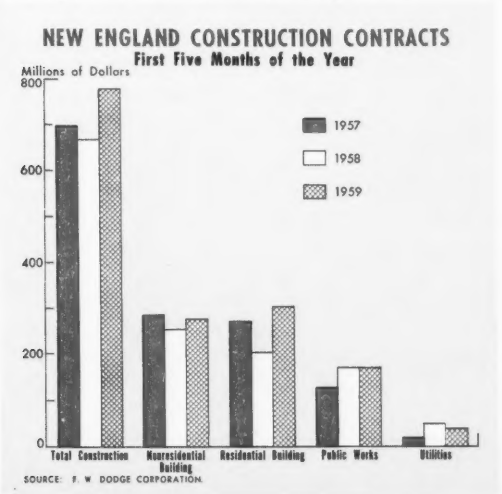
During the second quarter the prime rate for business loans at major commercial banks rose to 4½ percent, commercial paper and bankers' acceptance rates rose by one-half of 1 percent, yield rates on Treasury bills, corporate and tax-exempt bonds continued to rise, Federal Reserve Bank discount rates were raised to 3½

percent, and the issuing of new long term U. S. Government bonds became virtually impossible within statutory interest rate limitations.

As the second quarter commenced, pressure for funds was already being exerted by requirements for new housing activity and governmental debt financing. During the second quarter this pressure was intensified by an expanding demand for commercial and industrial loans and a resurge in the extension of consumer instalment credit. At the same time the inflow of new saving into some investment channels slowed somewhat, as can be attested in this region by heavier deposit withdrawals at mutual savings banks, a retarded rate of growth in time deposits at commercial banks, and an increasing ratio of redemptions to sales of Series E and H savings bonds.

Construction activity has contributed a good share to the growth of the New England economy in 1959. Tabulations by F. W. Dodge Corporation indicate that the aggregate value of construction contracts for the region during the first six months exceeded the comparable 1958 figure by 15 per cent, and that the April 1959 total set a record for all months. Whereas public works and utilities provided the greatest growth rates during most of 1958, the center of strength has shifted in 1959 to residential construction where for the first six months this year's contracts surpassed last year's by 47 percent.

In the region's ***agriculture,*** the spring of 1959 found dairy farmers with fairly favorable prices and incomes, poultry prices and incomes the lowest since the early 1940's, and potato prices making a strong but belated rally from very low levels. In the aggregate, gross incomes for the first half of 1959 may be down slightly from a year ago but net incomes severely down.



In early 1959 prices received by dairymen were 3 percent above a year ago, but costs were up about 2 percent. Egg prices in mid-May were the lowest since 1941, and recovery is not expected for some months. With broiler prices during the first six months of 1959 below year-earlier levels and production markedly up, gross incomes may have been close to last year's, but net incomes were practically nonexistent.

Summer ***vacation business*** reported guest occupancies through June to be up 1 percent over a year ago, despite unusually rainy weather. Advance reservations for July and August accommodations suggested continuing gains over 1958 business. Boys' and girls' summer camps opened with July registrations equal to those of 1958, and August slightly higher.

Durable Goods Manufacturing

The recovery in operations following the recession was rather irregular for New England's ***metals*** industries until the spring of 1959. Then prospects of a steel strike spurred order placing by steel users as an inventory hedge, and they in turn received a rising flow of orders from their own customers. By May employment in the metals industries had been rebuilt by about 8 percent from minimum recession levels, and workweeks were lengthened. The extent to which this recovery is due to threat of a shutdown at the steel mills and the extent to which the metals industries in New England can withstand a prolonged shutdown are subject to conjecture. Some feel that a shutdown of 6 weeks' duration could be seriously harmful to industrial operations. Foundry activities have increased moderately, and needed supplies of pig iron from the local blast furnace should not be directly impeded by a steel strike. Demand for piping has been buoyed by good demand from public works and housing projects. Copper and brass supplies seem adequate for current needs, but could become in short supply in the event of a strike.

Activity at New England ***nonelectrical machinery*** plants has recovered considerably, and employment in May was 5 percent greater than a year earlier. But full recovery to pre-recession levels must overcome some formidable obstacles. Some units for the manufacture of textile machinery have been relocated outside of New England, but this may eventually be offset by the development and production of a new loom winder within the region. Keen competition keeps the manufacture of paper machinery pretty much in a buyers' market. Producers of machine cutting tools have had to face stiffer competition from foreign producers not only in overseas markets, but even in domestic markets.

The ***electrical machinery*** industry in New England gained 13 percent in employment during the year ending in June and increased its relative importance in the regional economy. Concentration of growth continues in the electronics branch of the industry, particularly as related to development and production of components for guided missiles and defense detection systems.

The manufacture of ***transportation equipment*** in New England showed but a slight net growth in employment over the past 12 months. In Connecticut the trend has been generally down as the aircraft segment has attempted to adjust operations to reduced defense appropriations for manned aircraft. The relative contribution of automobile assembly operations in the industry is considerably less than in earlier years. Massachusetts and Maine shipyards are still favored with good order backlogs for the construction of oil tankers and naval vessels of various types.

Activity at New England ***ordnance*** plants continued steadily during the quarter with some further shift to guided missile production. Further recovery in employment occurred in the manufacture of ***instruments*** such as measuring and control devices, clocks and watches.

Strengthening demand for eastern white pine, beech, birch, maple, and hardwood flooring aided New England's ***lumber*** industry in coming out of the doldrums during the second quarter. Prices continued stable as sales increased substantially.

New England ***furniture*** producers experienced a slight drop in business during the quarter as dealers in the national market withheld orders in the hope of securing further price cuts. Demand from regional dealers has been good, and the over-all outlook is promising for producers who offer lines of modern design.

Nondurable Goods Manufacturing

Operations at New England ***textile*** mills in the first half of 1959 were the best in several years. Order backlogs have built up in all segments of the industry. Employment since March has been above comparable 1958 levels. Workweeks have lengthened, and customary vacation shutdowns of the mills will be more restricted than in other recent years. Despite the seasonal easing of activity in the second quarter, the average daily consumption of cotton in June by New England mills was up 18 percent over a year ago. Demand for fine cotton goods has been strong. Woolen and worsted mills were very busy during most of the quarter.

Prices of textile fabrics have advanced sufficiently more than costs to improve profit margins. This spring the industry granted the first general wage increase in three years. Imports of textiles, however, have risen rapidly, and the competitive position of domestic producers will be further worsened as the subsidy on domestic raw cotton sold abroad is raised in August.

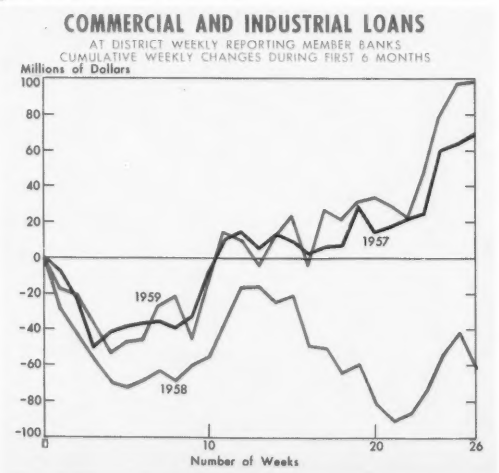
Although the ***apparel*** industry experiences a seasonal slowdown in the spring, employment in the industry has continued above that of a year earlier. Orders for fall merchandise, both for men's and women's wear, have been in better volume than a year ago because of improved retail sales and low inventories at the stores.

New England ***shoe*** factories have had to date the best year on record. Output for the first five months was 14.5 percent greater than a year ago, and constituted 35 percent of the national production. A good pace of retail sales has apparently prevented store inventories from building up above normal. Advance orders are in good volume throughout the industry. Some advance in shoe prices has followed higher costs of labor and especially of leather.

The early date for Easter this year lengthened for the ***jewelry*** industry the seasonal lull which precedes work on fall merchandise. However, employment and hours worked at the Rhode Island plants were greater than a year ago and advance orders show improvement in volume.

Employment in the region's ***rubber*** products industry increased during the second quarter, although it was temporarily interrupted by a labor dispute at some of the plants. Demand for products, especially replacement tires, was generally greater than a year ago.

A strong recovery trend in the ***pulp and paper*** industry continued during the second quarter. Almost all New England plants reported a substantial increase in the flow of new orders. Production was estimated to be from 5 to 7 percent above that of the first quarter, but employment gains were more modest.



A Close Look at Bank Earnings

Are savings deposits as profitable to a bank as demand deposits? How profitable are instalment loans? How much interest can a commercial bank afford to pay on time deposits? *Functional Analysis of Income and Expenses of Member Banks* is the tongue-twisting name of a study conducted annually by the Federal Reserve Bank of Boston to help answer these questions.

Basically, Functional Analysis is a simplified form of cost analysis tailored to meet the needs of small- and medium-sized banks. Its primary aim is to acquaint management of these banks with information about the income and expense of certain of their operations. Since banks are included with varying amounts of time deposits, instalment loans and number and size of branches, some partial answers to the questions asked earlier can be given.

Attempting to determine the cost of and profit from various banking functions gives rise to many knotty accounting problems. For example, a serious problem in measuring the expense of servicing demand deposits as compared with time deposits is the allocation of overhead cost and officers' salaries on a reasonable basis. The costs of making various types of loans and investments are, of course, difficult to measure. A particularly difficult problem is attributing specific assets to demand deposits and time deposits so that the profit from each can be measured.

The analysis consists basically of separating the costs of processing deposits (including the cost of interest payments) from all other banking costs and determining the net income from invested funds in such a way that it can be allocated to demand and time deposits.

Bank Size

Functional Analysis was not designed to measure the relative profits of large and small banks. But since the 80 banks included in the study range in size from less than $3.5 million in deposits to $25 million, it is possible to compare the performance of the small banks with the large. The 20 smallest banks had net current earnings after applicable taxes of .74 percent of their available funds (total assets less fixed assets) while the 20 largest banks earned .58 percent on their available funds. The 40 middle banks, ranging in size from $5.5 to $16 million in deposits, earned about .66 percent. Thus it appears that the smaller banks were on the average more profitable than the larger banks. A look at the balance sheets of these banks does not provide any easy explanation. Both large and small banks had roughly the same proportion of their assets in loans and investments. About the same proportion of their loans were instalment loans. Moreover, the distribution of deposits between time and demand deposits was about the same for the large and small banks.

With approximately the same balance sheet structure, what accounts for the difference in profits of the two groups of banks? The most important factor is that a larger proportion of the income of the small banks was from tax-exempt state and municipal securities. The difference between the large and small banks in earnings before taxes was relatively small, but the small banks paid only 39 percent of their earnings in taxes as compared with 50 percent for the large banks. In addition, the small banks charge somewhat higher rates on their loans, and this is not completely offset by higher expenses.

Profits on Time Deposits

The profits from time deposits of commercial banks are a perennial topic of discussion among New England bankers. Many bankers feel that time deposits are a good source of profits and attempt to attract such deposits. Others feel that time deposits are unprofitable and either do not accept time deposits or do so only as a convenience to their customers or because competition from other commercial banks makes this necessary. Still other banks may feel that time deposits are profitable but do not aggressively seek them because they do not want to compete with mutual savings banks which may be big depositors or stockholders. This wide range of opinion was represented among the banks included in the Functional Analysis study. Seven banks had no time deposits but for six others over 60 percent of their deposits were time.

There are several factors tending to make time deposits profitable. Time deposits require less cash held on hand than the more volatile demand deposits, and a lower reserve with the Federal Reserve System is required. While country banks must keep reserves with the Federal Reserve, currently equal to 11 percent of their demand deposits, the requirement against time deposits is now only 5 percent.

Banks with a high proportion of time deposits can invest a larger fraction of their assets in mortgages, which generally yield a better return than most other types of loans or investments. Expenses of servicing accounts are substantially lower for time deposits. For time deposits operating expenses were only 0.58 percent of the

amount of such deposits. For demand deposits the comparable figure was 2.26 percent. Service charges offset about one-third of the demand deposit expenses, but even taking this into account demand deposit expenses were 1.52 percent of demand deposits——nearly three times the time deposit expense ratio.

These factors account for the result that the 20 banks with the highest proportion of time deposits (over 45 percent of total deposits) had net current earnings before taxes and before interest on time deposits of 2.17 percent of total available funds, while the 20 banks with the lowest proportion of time deposits (less than 15 percent of total deposits) earned only 1.54 percent. After deducting interest paid on time deposits the picture changes. Net current earnings after interest of the low time deposit banks were 43 percent greater than the high time deposit banks.

If the bank wants a large volume of time deposits it must pay for competitive reasons a higher rate than it would pay if it were not interested in time deposits. Banks which do pay a low rate of interest find their smaller volume of time deposits highly profitable. The banks with the lowest proportion of time deposits paid only 1.31 percent interest to depositors, and their net earnings after tax on their time deposits was 0.91 percent. The banks with the high proportion of time deposits paid 2.34 percent and earned only 0.44 percent on their time deposits.

The 80 banks on average earned 0.57 percent after taxes on their demand deposits and 0.41 percent on their time deposits. The fact that time deposits may be less profitable than demand deposits should not necessarily lessen a bank's interest in building time deposits. Time deposits did yield a net profit even after absorbing some overhead that would otherwise fall on demand deposits.

Instalment Loans

The profits from instalment loans are another item of controversy among bankers. New England banks have been the leaders in the development of instalment lending——a Boston bank made instalment loans to finance automobile purchases in 1916. But some bankers question the wisdom of going into "retail banking."

Bankers enthusiastic about instalment lending point to the high interest rates earned on such loans as well as the very low default rate. Bankers cool toward instalment lending cite the high costs of making and servicing the loans and the danger of widespread losses in a serious depression despite their fine record during the 1930's.

The gross yield on instalment loans was indeed favorable. The 80 banks earned an average gross yield of over 9 percent on their instalment loans as compared with 5 percent on business loans and less than 5 percent on mortgage loans. However, expenses involved in instalment lending are three times higher than business loan expenses and over five times mortgage loan expenses. Even after deducting the higher expenses associated with instalment loans the net yield remains higher than other loans. For the average bank the net yield on instalment loans was 5.4 percent as against 4.1 percent on mortgage loans and only 3.8 percent on business loans.

As would be expected from these factors, the banks with the highest proportion of instalment loans in their portfolio were more profitable than banks with the fewest instalment loans; the former earned .72 percent on their total available funds while the latter earned .68 percent. There was not a consistent progression for the intervening groups of banks. This may have been due to the fact that instalment loans were usually a small proportion of total loans. Evidently other factors, such as the territory in which the bank operates or the length of time that the bank has been making instalment loans, have been important. The proportion of instalment loans in the portfolio apparently was not a decisive factor in determining the profits of the banks in the study.

The Typical Bank

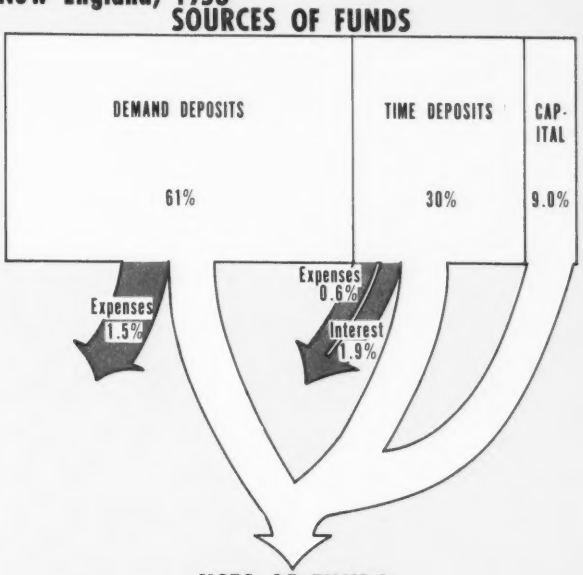
The data derived from the Functional Analysis allow us to sketch a description of the typical small- or medium-sized New England bank. The diagram shows the sources of the bank's funds, how these funds are invested and the return which the typical bank earns on its investments. The percentages in the diagram are averages based on the 80 banks participating in the Functional Analysis study.

While these figures are representative of the operations of New England banks, it should be noted that there are great differences in the performances of individual banks. Differences in management ability are responsible to a considerable extent for the variations in profits. For example, while the average net earnings after taxes were $6.44 per $1,000 of total assets, one bank earned $11.25 on the same basis and another bank only $1.80. These differences existed in particular expense items. The average expense ratio on instalment loans was 4.0 percent but one bank had expenses equal to 7.7 percent of instalment loans and one bank kept its expenses down to 0.9 percent. The data, then, for the average bank should be treated cautiously because of the wide variations from the average.

A TYPICAL BANK'S FINANCES

New England, 1958

The bank obtains funds from 3 SOURCES.

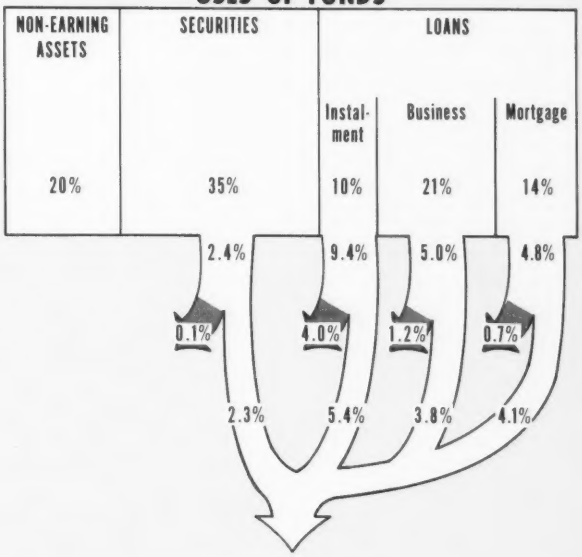


The funds are invested in these ASSETS

which return GROSS YIELDS,

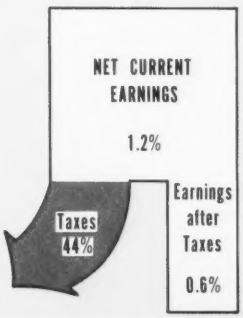
part of which are consumed by EXPENSES

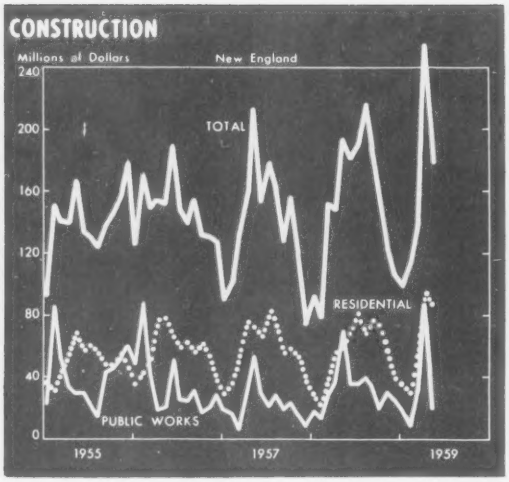
leaving NET YIELDS

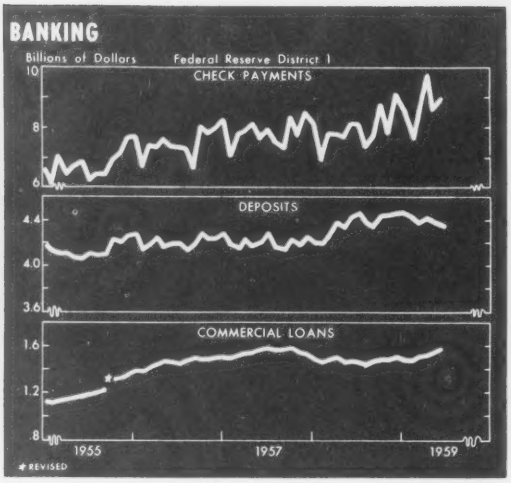


which comprise NET EARNINGS of 1.2% of TOTAL ASSETS.

TAXES take 44% of these EARNINGS, leaving EARNINGS after TAXES of 0.6% of TOTAL ASSETS.







MANUFACTURING INDEXES (seasonally adjusted)	MASSACHUSETTS (1950–52 = 100)			NEW ENGLAND (1950–52 = 100)			UNITED STATES (1947–49 = 100)		
	June '59	May '59	June '58	June '59	May '59	June '58	June '59	May '59	June '58
All Manufacturing	121	118	103	122	117	104	159	156r	134
Primary Metals	104	105	88	103	104	78	152	154r	103
Textiles	51	52	47	74	72	65	n.a.	118	95
Shoes and Leather	124	133	110	128	137	109	n.a.	n.a.	100
Paper	107	111	96	125	124	115	n.a.	180	157

1958 figures revised for Massachusetts and New England

	NEW ENGLAND	Percent Change from:		UNITED STATES	Percent Change from:	
	June '59	May '59	June '58	June '59	May '59	June '58
BANKING AND CREDIT						
Commercial Loans ($ millions) (Weekly Reporting Member Banks)	1,565	+ 4	+ 7	31,560	+ 2	+ 7
Deposits ($ millions) (Weekly Reporting Member Banks)	4,364	0	− 1	99,890	0	− 2
Check Payments ($ millions) (Selected Cities)	8,944	+ 4	+11	228,581	+ 6	+ 4
Consumer Installment Credit Outstanding (index, 1950–52 = 100)	221	+ 2	+ 3	241	+ 2	+ 8
TRADE						
Department Store Sales (index, seas. adj. 1947–49 = 100)	118	− 5	+ 3	145e	+ 1	+ 9
Department Store Stocks (index, seas. adj. 1947–49 = 100)	142	+ 3	+ 5	155	+ 3	+ 5
EMPLOYMENT, PRICES, MAN-HOURS, & EARNINGS						
Nonagricultural Employment (thousands)	3,589	+ 2	+ 3	52,516	+ 1	+ 4
Insured Unemployment (thousands) (excl. R. R. and temporary programs)	102	−17	−51	1,331	−13	−52
Consumer Prices (index, 1947–49 = 100)	127.0 (Mass.)	0	+ 1	124.5	0	+ 1
Production-Worker Man-Hours (index, 1950 = 100)	89.8 (Mass.)	+ 3	+12	101.6	+ 2	+13
Weekly Earnings in Manufacturing ($)	82.22	+ 1	+ 8	90.54	0	+ 9
OTHER INDICATORS						
Construction Contract Awards ($ thous.) (3-mos. moving averages, Apr., May, June)						
Total	210,219	+10	+20	3,659,765	+ 3	+ 9
Residential	92,199	+17	+49	1,756,577	+ 4	+33
Public Works	45,491	− 4	− 4	624,816	+ 7	−12
Electrical Energy Production (index, seas. adj. 1947–49 = 100)*	205.7	− 4	+13	228.3	−12	+ 3
Business Failures (number)	71	+ 9	+ 9	1,244	+10	− 1
New Business Incorporations (number)	985	+ 9	+33	16,157	− 3	+35

*Figure for last week of month

r = revised

n.a. = not available
e = estimated